



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,597	10/12/2004	Joseph P. Errico	SPINE 3.0-437 CIPCIPCIPCI	8309
51640 SPINE MP LERNER, DAVID, et al. 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090	7550 03/30/2012		EXAMINER PELLEGRINO, BRIAN E	
			ART UNIT 3738	PAPER NUMBER
			MAIL DATE 03/30/2012	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/784,597

Applicant(s)

ERRICO ET AL.

Examiner

BRIAN PELLEGRINO

Art Unit

3738

Period for Reply
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-11, 13, 15-18 and 20 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-11, 13, 15-18 and 20 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-650)
Paper No(s)/Mail Date 6/16/11
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/11 has been entered.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,3-7,10,11,13,15-18,20 are rejected under 35 U.S.C. 103(a) as being obvious over Ralph et al. (6471725) in view of Paponneau (2003/176925) and in view of Boriani et al. (6159211). Ralph et al. disclose (Fig. 1b) first and second apparatus

baseplates (104,106) integrally coupled to a trunk (103) extending between the first and second apparatus baseplates, wherein the first and second apparatus baseplates and the trunk form a monolithic, solid structure. However, Ralph et al. do not explicitly disclose holes in the baseplates in a direction that is perpendicular to the surgical approaches. Paponneau teaches (Fig. 3) the baseplates of a spinal apparatus include a plurality of engagement holes **64A-C**, **66A-C** extending into the baseplate to a direction substantially perpendicular to the plurality of surgical approach directions. It would have been obvious to one of ordinary skill in the art to use perpendicular oriented holes with respect to the surgical approach as taught by Paponneau with the plates of Ralph et al. in order to provide an engagement that would allow a tool to grip into the holes. Further Ralph et al. do not disclose the plates having an anterior facing surface extending perpendicular to the anterior surgical approach and two anterior-laterally facing surfaces each extending at an angle from the anteriorly facing surface. Boriani et al. teach (Fig. 19) a plate having an anterior facing surface **88** extending perpendicular to the anterior surgical approach and two anterior-laterally facing surfaces each extending at an angle from the anteriorly facing surface. Each of the faces has engagement structure for one of the surgical approach directions, col. 4, lines 27-31 of Boriani. It would have been obvious to one of ordinary skill in the art to modify the surface of the baseplates of Ralph et al. as modified with Paponneau and incorporate an anterior facing surface extending perpendicular to the anterior surgical approach and two anterior-laterally facing surfaces each extending at an angle from the anteriorly facing surface as taught by Boriani et al. such that it gives the surgeon the ability to

orient the structure from different angles giving greater versatility. With respect to claim 13 Boriani can be said have an anterior facing surface angled at “approximately 33.4 degrees” with respect to each of the anterior-laterally facing surfaces. Regarding claim 15, Ralph shows (Fig. 2C) different dimensions for the plates. With respect to claims 16,17 Ralph in view of Paponneau does not explicitly disclose the width dimension in a range up to 40mm. Boriani et al. teach that the width of the implant body is 40mm, col. 5, lines 17-19. It would have been obvious to one of ordinary skill in the art to use a width of 40mm for the plates as taught by Boriani et al. in the baseplate of Ralph as modified with Paponneau such that the baseplates have a sufficient dimension to accommodate a lumbar region as taught by Boriani. Regarding claim 17 it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a depth having a range between 14-18mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ralph et al. (6471725) in view of Paponneau (2003/176925) in view of Boriani et al. ‘211 as applied to claim 1 above, and further in view of Kuras (6607558). Ralph as modified with Paponneau and Boriani et al. is explained supra. However, Ralph in view of Paponneau and Boriani fail to disclose the contour of the outward facing surface of the baseplates to have a contour of a dome. Kuras teaches (Figs. 1-3) a spinal device that has two upper and lower support structures **20, 40** with convex or domed outward

facing surfaces **22, 42** for engaging the disc space. It would have been obvious to one of ordinary skill in the art to use a convex or domed contour as taught by Kuras for the baseplates of Ralph in view of Paponneau as modified with Boriani et al. such that it more closely matches the contour of the vertebrae surface that the apparatus is to engage.

Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ralph et al. '725 in view of Paponneau (2003/176925) and Boriani et al. '211 as applied to claim 6 above, and further in view of Baumgartner (5370697). Ralph as modified with Paponneau and Boriani et al. is explained supra. However, Ralph et al. in view of Paponneau as also modified with Boriani fail to disclose the floor of the groove is narrower than an opening of the groove or the groove floor being ridged. Baumgartner teaches (Fig. 1a) a spinal device that has two upper and lower support structures **2, 3** with an inner "groove" having a floor with ridge **21** for holding the trunk component **5**. Baumgartner additionally teaches (col. 2, line 58) a narrower profile for the floor of the "groove". It would have been obvious to one of ordinary skill in the art to modify the baseplates and use a ridged floor as taught by Baumgartner in the baseplates of Ralph as in view of Paponneau as modified with Boriani such that it more effectively retains the trunk between the two baseplates.

Response to Arguments

Applicant's arguments with respect to claims 1,18 have been considered but are moot because the arguments do not apply to any of the references being used in the

current rejection. To address the new limitation, Ralph '725 is used to show the monolithic spinal structure having baseplates and a trunk. The remaining features are taught in the references of Paponneau and Boriani.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN PELLEGRINO whose telephone number is (571)272-4756. The examiner can normally be reached on M- F (9am-5:30pm).

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Thomas Sweet at 571-272-4761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to TC3700_Workgroup_D_Inquiries@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC 3700
/Brian E Pellegrino/
Primary Examiner, Art Unit 3738